

Entry of the foregoing amendment is respectfully requested. This amendment is intended to place the claims in a more conventional format and eliminate the multiple dependency of the claims.

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Attachment to Preliminary Amendment dated May 18, 2001

Marked-up Claims 1-12

1. (Amended) A method of controlling the use of a smart card comprising a microprocessor [able to effect] that executes cryptography calculations in the card for effecting authentication sessions at the time of a transaction between the card and a terminal, [characterised in that the said method uses] and at least one control counter, [(C_{KDP}) and in that, for a transaction comprising at least one authentication session by the card, the method consists] comprising the steps of:

- decrementing or incrementing the control counter by one unit [(u)] at the start of [the transaction] a transaction comprising at least one authentication session by the card, and

- if the authentication by the card has succeeded, [effecting the reincrementation or decrementation of the] subsequently incrementing or decrementing, respectively, said control counter by [the] said unit [(u)].

2. (Amended) A method according to Claim 1 [2, characterised in that] wherein the control counter [can count] counts down from or [count] counts up to a blocking value.

3. (Amended) A method according to Claim 2, [characterised in that it comprises the use of a] further including the step of using said control counter by [an] at least one encrypting key [and/or by a pair of encrypting keys] contained in the card.

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4. (Amended) A method according to Claim 3, [characterised in that] wherein the blocking value associated with a counter is a function of the type of transaction in which [the] an associated key [or the associated pair of keys] is used.

5. (Amended) A method according to Claim 3, [characterised in that] wherein the decrementation or incrementation unit of a control counter represents the number of cryptographic calculations with [the] an associated key [or the associated pair of keys,] performed up till then and including the one consisting of [the] said authentication session during [the] said transaction.

6. (Amended) A method according to Claim 3, [characterised in that] wherein the control counter associated with a key [or a pair of keys] is decremented or incremented by a new unit before each of the cryptographic calculations using [the] said key [or the said pair of keys] up to and including the one relating to [the] said authentication session by the card.

7. (Amended) A method according to Claim 5, [characterised in that the reincrementation or decrementation] wherein the subsequent incrementing or decrementing of the counter by the unit representing the number of cryptographic calculations is effected if the authentication session by the card has succeeded.

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8. (Amended) A method according to Claim 6, [characterised in that it comprises a pointing counter (D_{KDP}) for] further including the step of storing the number of decrements or increments by one unit that have been carried out in a pointing counter, to [permit] control the [reincrementation or decrementation] subsequent incrementing or decrementing of the control counter [(C_{KDP})] via the content of the pointing counter, if the authentication session by the card has succeeded.

9. (Amended) A [control] method according to [any one of the preceding claims, characterised in that the] claim 1, wherein said authentication session by the card is effected at the time of a connection by direct link to a server.

10. (Amended) A method according to [any one of the preceding claims, characterised in that] claim 3 wherein, when the control counter is decremented, or incremented, up to a limit value, it blocks the use of the associated key [or associated pair of keys].

11. (Amended) A method according to Claim 10, [characterised in that] wherein the blocking of the use of the key [or pair of keys] is irreversible.

12. (Amended) A smart card comprising at least one control counter associated with at least one key [and/or one pair of keys for implementing a control method according to any one of the preceding claims] and a microprocessor which executes the functions of decrementing or incrementing the control counter by one unit at the start of a transaction comprising at least one authentication session by the card, and subsequently incrementing or decrementing, respectively, said control counter by said unit if the authentication by the card has succeeded.